

Date: Tuesday, 10/02/2009 3:09:33 PM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : ROD END BEARING
Job Number : 45723	
Estimate Number : 13133	
P.O. Number :	Part Number : D36931
This Issue : 10/02/2009 S.O. No. :	Drawing Number : D3693 REV B
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : PURCHASED PARTS	Drawing Revision : B
Previous Run : 44828	Material :
Written By :	Due Date : 20/02/2009 Qty: 10 Um: Each
Checked & Approved By : <u>JULIE DAWSON</u>	
Comment : Est Rev:A New Issue 08-01-17 JLM Verified By:EC Est Rev:B As per Rev B 09-01-20 JLM Verified By:DD	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: Issue P/O: 8191
 Purchase Part Number: 047-140-252-005
 Supplier: Bell
 Certificate of conformity is required

CY 09/02/12 @ 10

2.0	047 140 252 005	Rod Bearing End
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)
 Rod Bearing End

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1
 Receive & Inspect For Transit Damage
 Ensure certificate of conformity is attached

CY 09/02/12 @ 10
09-02-19 @ 10

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

5.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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Comment: CONVENTIONAL MILLING MACHINE
 DRILL AS PER DWG D3693 USING DT9452 STOPS
 DEBURR

09/02/27

10 pcs

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3693-1 PAR #: N/A Fault Category: Prod/Manufact Parts NCR: Yes No DQA: 15 Date: 09/03/03
D3684-045 D205-777011
 Resolution: re-work Disposition: re-work QA: N/C Closed: 15 Date: 09/03/03

NCR: <u>45723</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/02/19	5.0	Hole Indexation was drill on the wrong side R.C. operator error	<u>UP</u> 09.02.24 per QSI 042	DRILL TOP HOLE ON WRONG SIDE, SEE ATTACHED DWG opposite to bottom hole in drawing	<u>UP</u> 09/02/19	<u>UP</u> 09.03.02 per QSI 042	<u>UP</u> 09.02.24 per QSI 042	<u>UP</u> 09.02.26

NOTE: Date & initial all entries

Date: Tuesday, 10/02/2009 3:09:33 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ROD END BEARING

Job Number: 45723

Part Number: D36931

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



09/02/07



10-yes

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

09/02/06

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

ST/18

09/03/02

9.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/03/02

Job Completion



09.03.02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

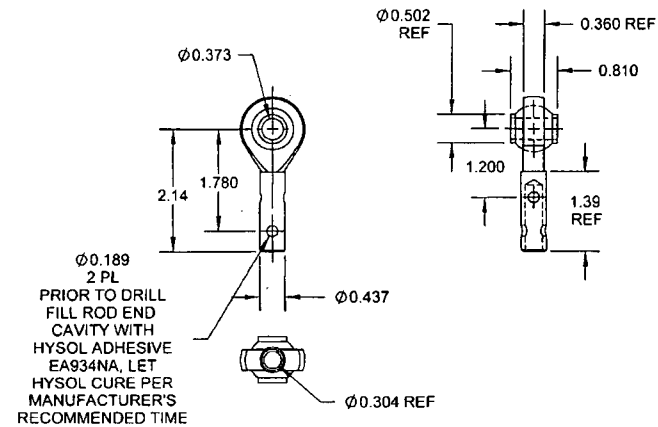
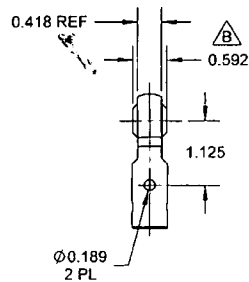
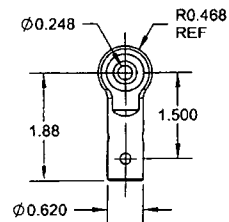
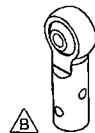
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SPECIFICATION CONTROL DRAWING



PRIOR TO DRILL
FILL ROD END
CAVITY WITH
HYSOL ADHESIVE
EA934NA, LET
HYSOL CURE PER
MANUFACTURER'S
RECOMMENDED TIME

**D3693-1
ROD END BEARING**

**D3693-3
ROD END BEARING**

RELEASED
09/01/15

DART P/N	DESCRIPTION	BELL P/N	WEIGHT (lb)	FINISH	IDENTIFY
D3693-1	ROD END BEARING	047-140-252-005	0.19	NONE	NONE
D3693-3	ROD END BEARING	205-060-101-001	0.14	NONE	NONE

B	REMOVED SHADED VIEW (ZN D8-1, D1-1), 0.592 WAS 0.591 (ZN C5-1); REFORMATTED SHEET; TRANSFORMED GENERAL NOTES TO TABLE FORMAT	RF	08.12.15
A	NEW ISSUE	RF	08.03.12
REV	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.12.15		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D3693** REV. B
SHEET 1 OF 1
TITLE **ROD END BEARING** SCALE NTS

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Eagle Copters Maintenance Ltd

823 McTavish Rd, NE
Calgary, Alberta T2E 7G9
Canada

PACKING SLIP

Date Shipped: February 13, 2009

Telephone: (403) 250-7370

Fax: (403) 250-7110

Shipment number: **SH#-000588**

Manifest number:

Ship To: **Dart Aerospace Ltd.**

1270 Aberdeen Street
Hawkesbury, Ontario K6A 1K7
Canada

Ship Via: **FED EX**

Carrier Terms:

Waybill: 7973 4009 2656

Shipping Instructions:

Customer P.O. Number: **PO00008191**

Phone: **613-632-5200**

Item	Part Number	Part Description	Current Location	Qty	UOM	Serial Number	Lot Number
1	205-060-101-001	ROD END	Shipping Area	7	Each		LT-09-002035
				Sales Order Number: SO09-00176.001		Eagle PO Number PO-09-000365.11	
Comments							
2	047-140-252-005	BEARING,ROD END	Shipping Area	10	Each		LT-09-002036
				Sales Order Number: SO09-00176.002		Eagle PO Number PO-09-000365.12	
Comments							

Sales Order Number **2009000176**

Parts on Back Order

Customer **Dart Aerospace Ltd.**

Part Number	Part Description	Qty Sold	BackOrder Qty
205-060-101-001	ROD END	10.00	3.00
047-140-252-005	BEARING,ROD END	10.00	0.00

* End of Report *

>> denotes that the Packing Slip line item has already been printed.

Eagle Copters Maintenance Ltd

S23 McTavish Road, NE Calgary, Alberta T2E 7G9

TCCA AMO Approval No. 6-81

LOT #: LT-09-002036



Sold To: SO09-00176.002

Sold Date: 2/13/2009 10:27:20PM

Part No: 047-140-252-005

Description: BEARING ROD LINE

Serial No.

Condition: New

Qty Sold: 10.00

Cure Date:

Manufacturer: Bell Helicopters (Manufacturer)

	Cycles	Hours
Total Time:		0.0

TSO:

Details of work performed/reason for removal

Receiving Inspection

Additional work to be performed upon installation

The maintenance described has been performed in accordance
with the applicable standards of airworthiness

February 13, 2009

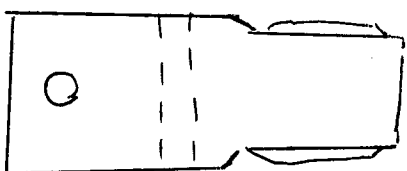
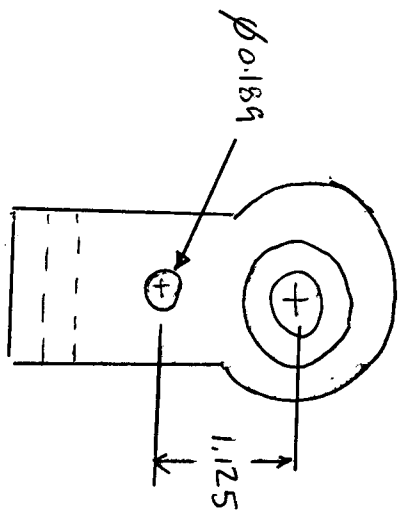
Inspector

Signature: [Signature]
Eagle
6-81 70

Maintenance Release

DRILL TOP HOLE
CORROSION

04.02.24



D3693-1

Chris Provencal

From: David Shepherd [dshepherd@dartaero.com]
Sent: February 24, 2009 2:05 AM
To: 'Chris Provencal'
Cc: 'Mike Petsche'; 'Bill Beckett'; 'Jason Murdoch'; 'L Lacelle'
Subject: RE: Emailing: NCR-D3693-1.jpg

Chris,

Maybe I'm looking at this all wrong, but these parts mate with D3691-1, which threads into the turnbuckle. Therefore, I don't think it matters exactly what orientation the holes are drilled since the orientation can be corrected on installation.

Please confirm. If I am correct, then please accept the parts via this email.

David

PS. This does not negate the fact that we drilled 10 parts wrong before realizing that we had a problem. I believe we were lucky in this instance, but in my opinion, that's not good enough. We have to drill one and double check the part to the drawing.

-----Original Message-----

From: Chris Provencal [mailto:cprovencal@dartaero.com]
Sent: Monday, February 23, 2009 8:46 AM
To: 'David Shepherd'
Cc: Mike Petsche; Bill Beckett; Jason Murdoch
Subject: Emailing: NCR-D3693-1.jpg

David,

Qty(10) D3693-1 Rod End Bearing (Engine Mount Kit):

The 0.189 OD thru hole was drilled on the wrong face (see attached dwg). The only way to save them would be (a) to create a custom rod to install them on, which I don't think is acceptable as it would create a mess for replacement parts. (b) fill the hole with weld, however this is a critical part and I don't see how we could substantiate the effect it would have on your fatigue testing.

My recommendation is to scrap them. They cost \$105 each to purchase (\$1050 total) so I don't have authority to do so.

-Chris

No virus found in this incoming message.

Checked by AVG.

Version: 7.5.552 / Virus Database: 270.11.2/1964 - Release Date: 2/21/2009
11:05 AM

No virus found in this outgoing message.

Checked by AVG.

Version: 7.5.552 / Virus Database: 270.11.3/1967 - Release Date: 2/23/2009
7:17 AM